

# ROCHESTER'S IMPENDING STORM WATER MANAGEMENT PROGRAM

## Part II – Reasons Behind the New Permit Program

As you learned last month, if you are a...

Builder,  
Developer,  
Construction Contractor,  
Utility Company,  
Development Design Engineer or Architect,  
Landscape or Landscape Architect, or  
Rochester Property Owner (Business or Residential)...

...you will be affected by a newly mandated program that requires Rochester to obtain a storm water permit by March 10, 2003.

According to a 1996 Environmental Protection Agency study, approximately 40% of U.S. water bodies do not meet water quality standards and are classified as "impaired". A large portion of water quality impairments result from storm water runoff-related impacts. The federal objective of the Phase II storm water program is to implement or reform storm water management practices to protect and improve the quality of surface water bodies and their habitats. Permittees, such as the City of Rochester, will be obligated to create awareness about storm water impacts and help people change their behaviors in order to improve or restore water quality.

In Rochester, the South Fork of the Zumbro River has been classified by the Minnesota Pollution Control Agency as impaired for aquatic life and swimming because *fecal coliform* bacteria and turbidity levels exceed water quality standards. It is exactly this type of impairment that the Phase II Storm Water Program is meant to correct. To see a map that shows which part of the Zumbro River is impaired, along with other impaired water bodies in southeast Minnesota, go to the following web site:

<http://www.pca.state.mn.us/artwork/maps/tmdl-lm-conv-02.pdf>

[Note: Since the Minnesota Pollution Control Agency does not have the resources to test every water body, streams shown as not impaired may either have acceptable water quality or may be impaired but not tested.]

Development increases the amount of impervious area (that is, hard surfaces like cement, asphalt, roofing, and compacted soil), which then prevents infiltration of rain and snowmelt (or run-off) into the ground. As impervious surfaces increase, storm water run-off rates and volumes also increase. Additionally, aquatic habitats are degraded, flood potential and drainage systems are altered, local groundwater recharge is reduced, and pollutant loads increase. Water-dissolved chemicals and other contaminants are transported directly to surface water bodies without treatment. (Did you realize that storm sewers do not go to Rochester's wastewater treatment facility?) Pollutants can include substances such as sediment, pesticides, fertilizers, yard waste, pet and wildlife waste, hazardous wastes, fuels, oils, greases, salts, trash, and soaps.

We encourage all construction industry personnel to become especially knowledgeable about the detrimental effects of increased erosion. The loss of sediment to surface waters increases turbidity with several negative impacts. Increased sediment loads fill water bodies and change animal and plant habitats. By blocking sunlight and reducing visibility, sediment reduces predation success and animal survival. Because dark colors absorb and hold heat,

sediment increases normal water temperatures, again affecting the survivability of species. It acts as a “pollutant taxi,” catching and carrying dissolved chemicals to rivers and lakes. It also clogs storm sewers, increasing maintenance costs.

The next article in this series will focus on the permit requirements.

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***“Protecting water quality is everybody's business”***